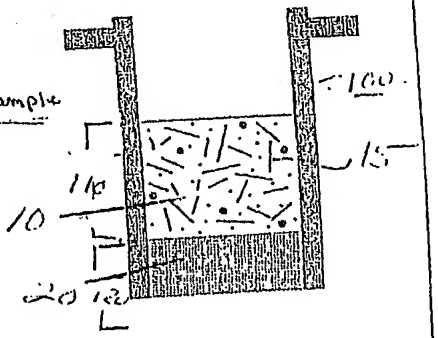
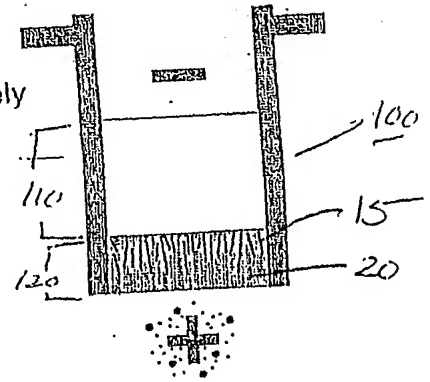
Step 1

- Load DNA analyte sample into microtiter wells



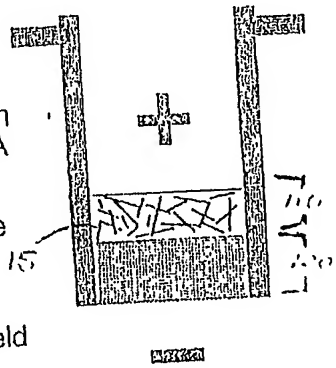
Step 2

- Apply electric field to electrophorese all negatively charged molecules
- The DNA analyte will be captured



Step 3

- Replace buffer
- Reduce sample volume in well if concentration of DNA analyte is also desired
- Apply current to denature hybrid and release DNA analyte from capture oligo
- Apply reversed electric field to electrophoretically elute DNA analyte into the sample volume in the well



Step 4

- Microtiter plate bearing purified and (optionally) concentrated DNA analyte samples ready for further analysis

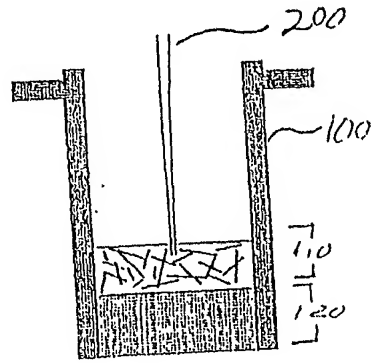


Fig. 1

Capture Probes and Uses Therefor
Inventor(s): Weir et al.
Serial No.: Not yet assigned
Atty Docket No.: EXT-070C1
Atty/Agent: Patrick R.H. Waller
Express Mail Mailing Label No. EV 012823698 US

Sample Prep for Sequencing

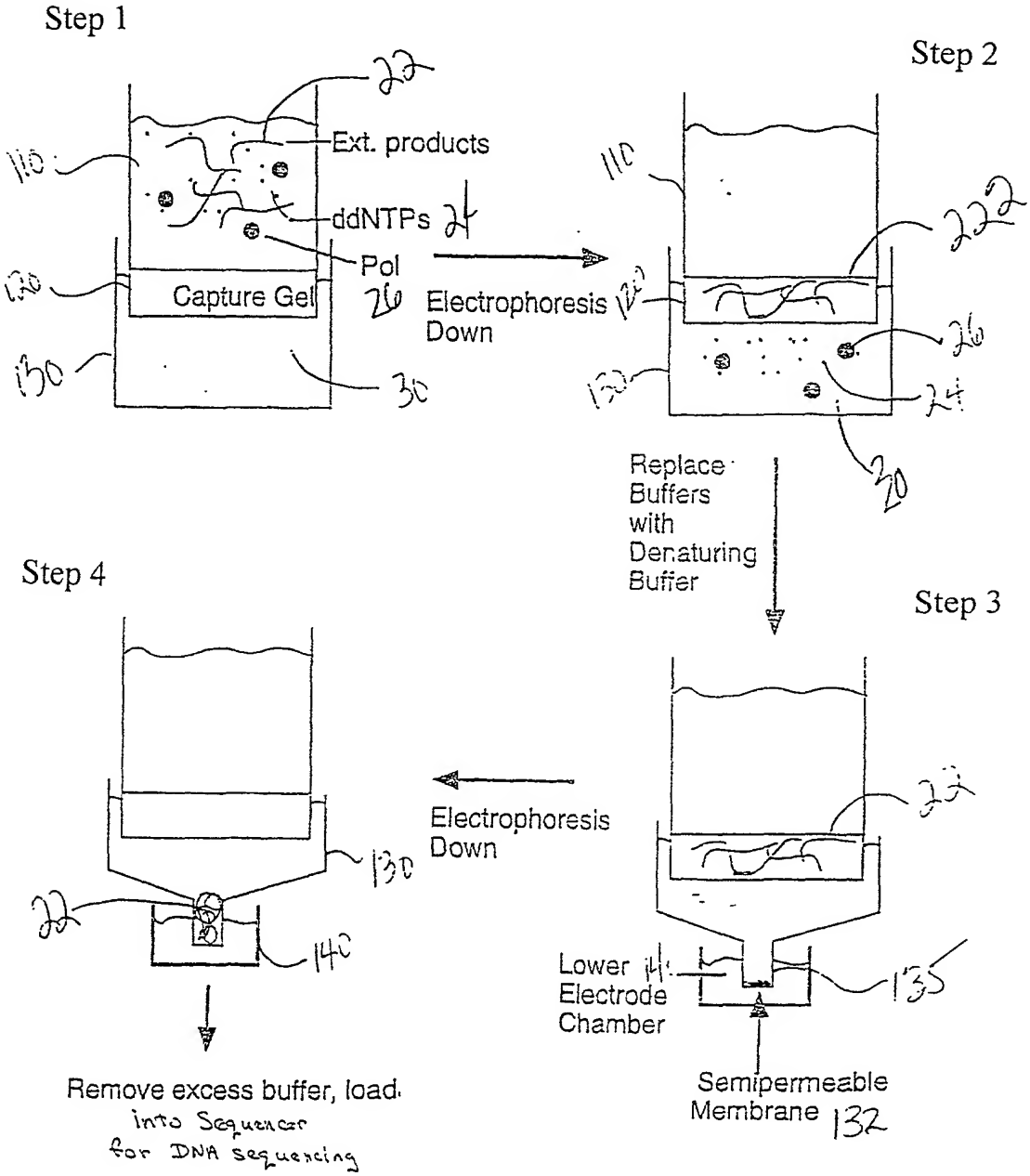


Fig. 2

Multiplexing: Use of Hybrigel to Purify Products of Multiple Reactions

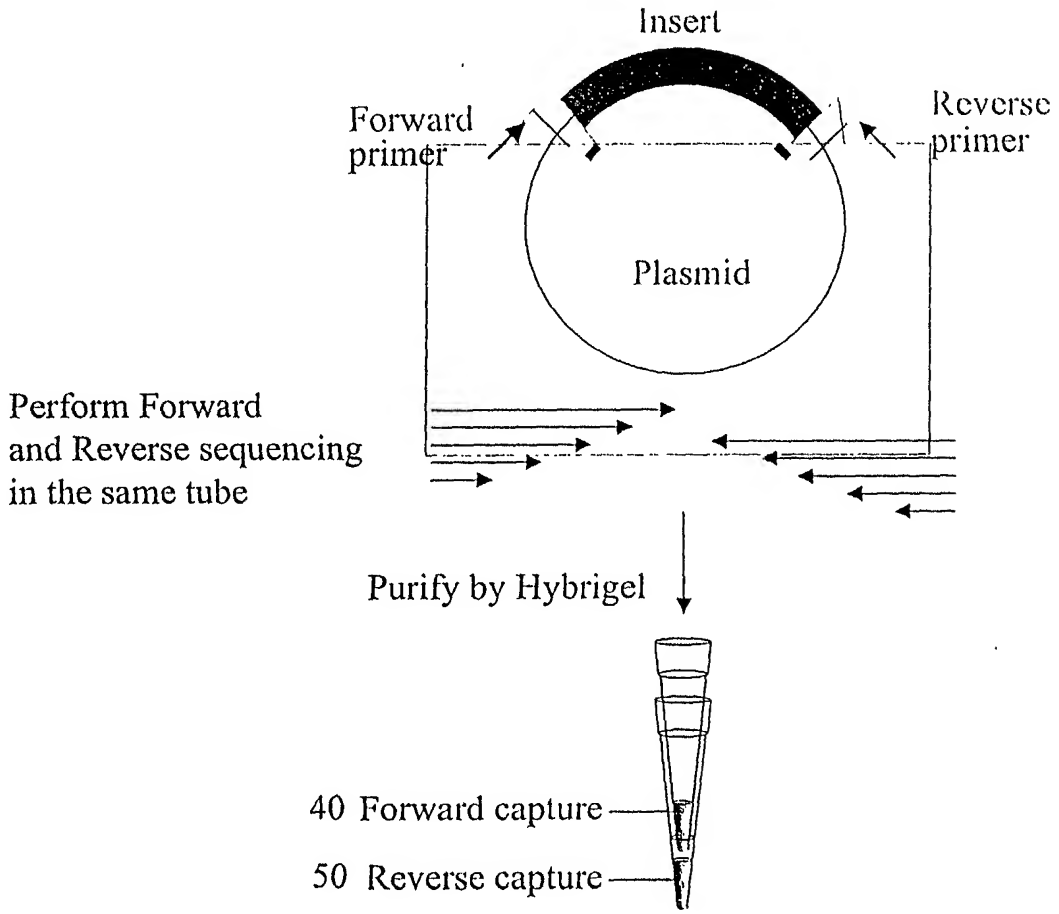


Fig. 3A

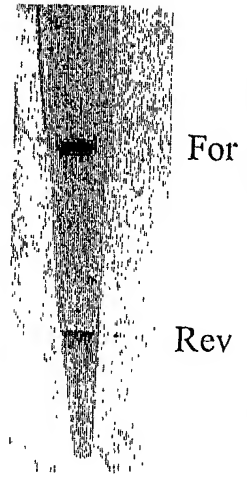


Fig. 3B

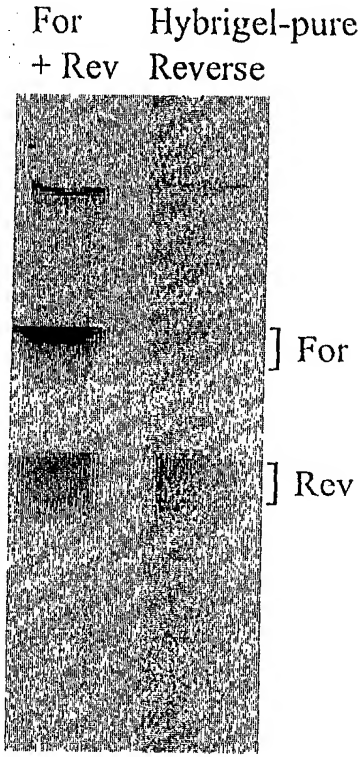


Fig. 3C

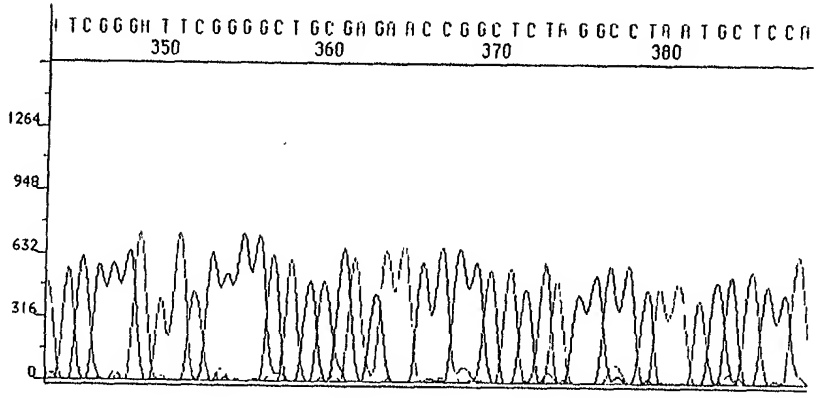


Fig. 3D

6249 →

polylinker

GGGATCCTCTAGAGTCGACCTGCAGGCATGCAAGCTTGGCACTGGCCGTCGTTTTACAA

← tgaccggcagcaaaatgt
-21 primer

5' ac-GGGATCCTCTAGAGTCG 6249-17ac

5' ac-TGCAGGCATGCAAGCTT 6269-17ac

5' ac-ATGCAAGCTTGGCACTGGCCG 6277-21ac

5' ac-ACTGGCCGTCGTTTTACA 6290-18ac

Fig. 3E

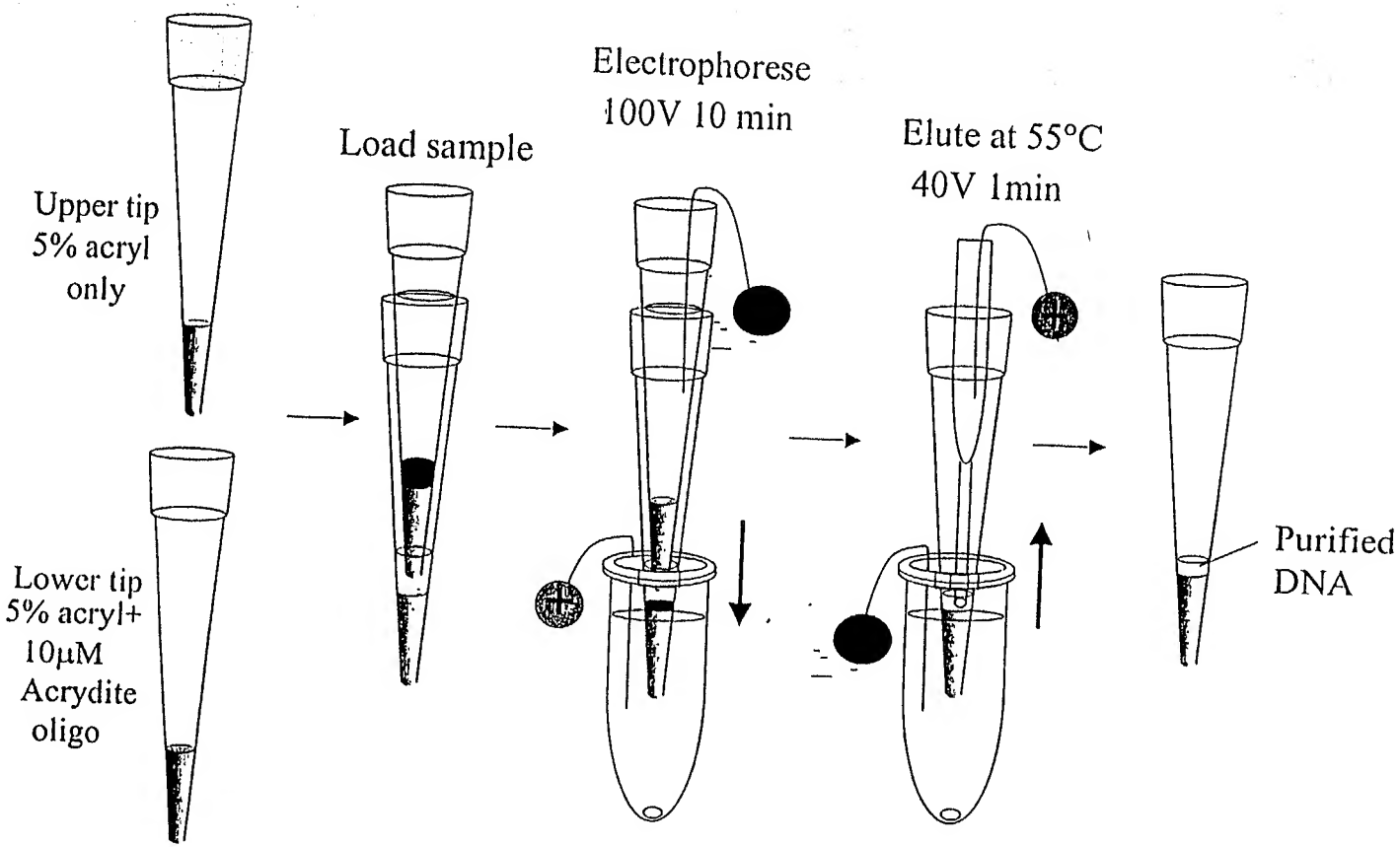


Fig. 4A

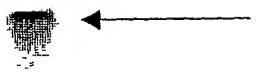


Fig. 4B

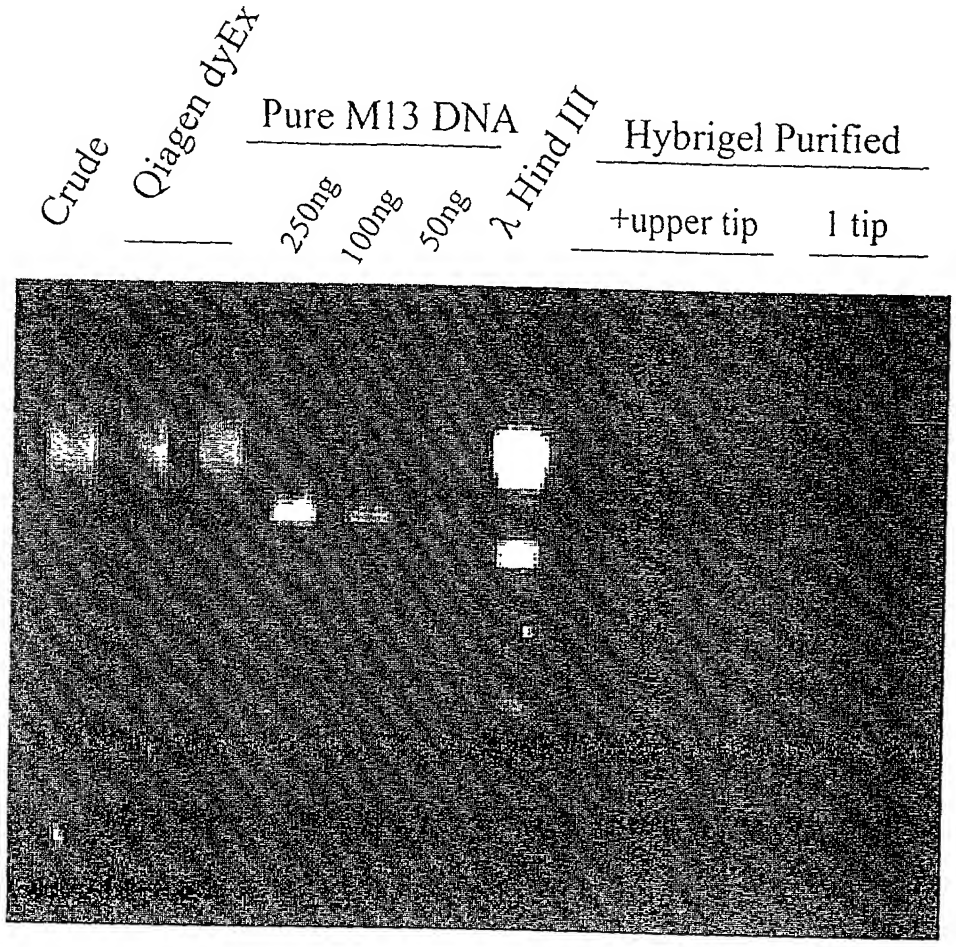

Crude
Qiagen dyEx
Pure M13 DNA
250ng
100ng
50ng
λ Hind III
Hybrigel Purified
+upper tip
1 tip

Fig. 5

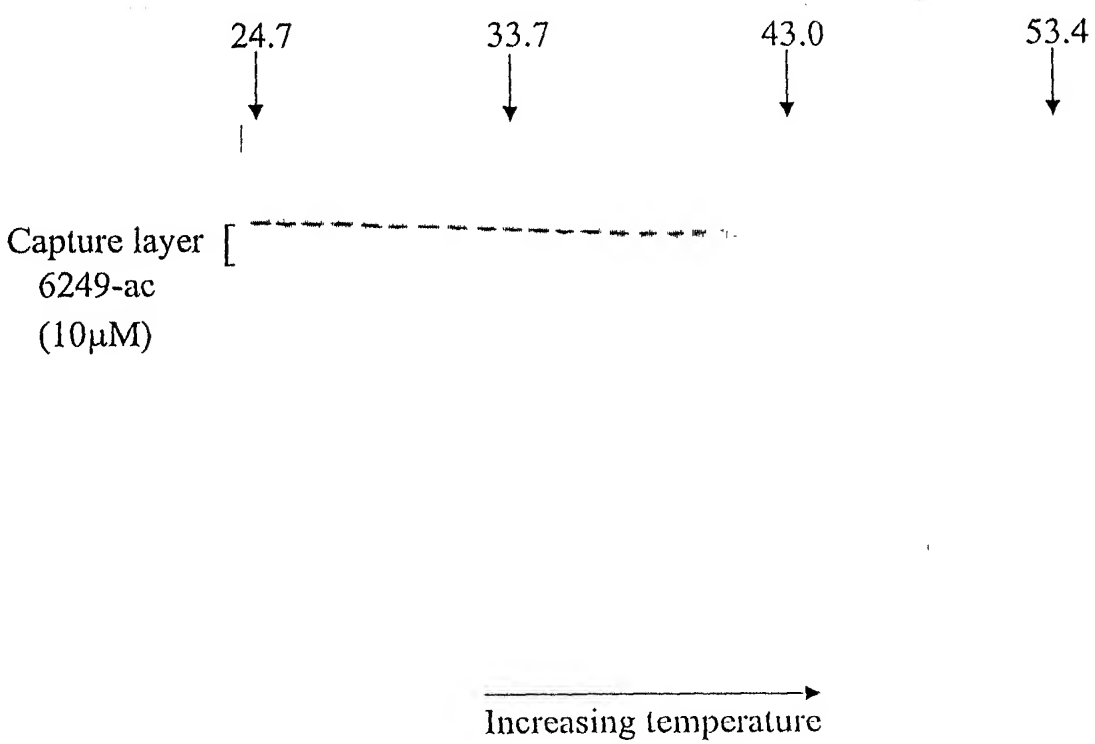


Fig. 6

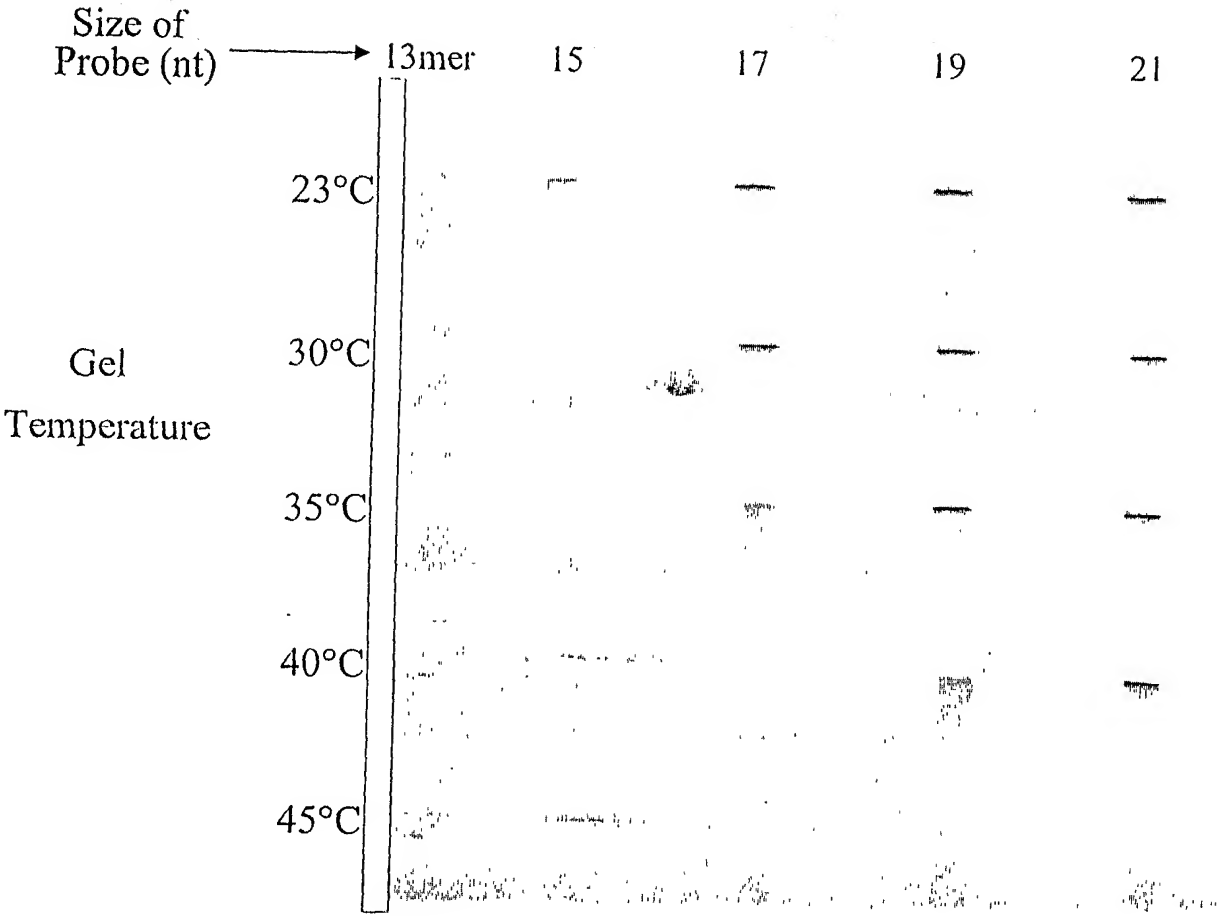


Fig. 7